

## ABSTRACT

In a display unit which makes coherent light perform scanning on a screen to display an image, it is necessary to rotate a polygon mirror at ultrahigh speed for display of a high resolution image such as HDTV, and therefore, a high-performance polygon mirror must be employed, and further, noise and power consumption during rotation of the polygon mirror cause problems.

Mirrors for multiple reflection (6a) and (6b) are inserted in a coherent light scanning optical system, whereby plural scanning lines can be obtained while one plane of the polygon mirror (5) scans one line of coherent light, leading to reduction in the rpm of the polygon mirror.